

sence of the pseudobranchiæ cannot be retained among the family characters, and is limited to the former genus. *Prototroctes* stands in the same relation to *Haplochiton* as *Coregonus* does to *Salmo*; and however the *Haplochitonidæ* may differ from the *Salmonidæ* in the structure of the jaws and intestinal tract, it is a most remarkable fact that the fresh waters of the southern hemisphere are inhabited by two genera with adipose fins, so extremely similar in outward appearance to the northern Salmonoids.

The species from Southern Australia is called *Prototroctes maræna*, and distinguished by having about eighty transverse series of scales along the body. The second species, from New Zealand, is very closely allied to it, but more elongate and having smaller scales. D. 12. A. 19. Transverse series of scales 100. The height of the body is nearly one-fifth of the total length (without caudal); the head is as small as in the other species, its length being contained six and a half times in the total (without caudal); the same uniform coloration as in *Coregonus*. For this species I propose the name of *Prototroctes oxyrhynchus*.

The fish were sent with the denomination "Mountain-Trout;" therefore it appears that they inhabit the fresh waters of the mountainous interior of New Zealand. The stomach and intestines were crammed full of a clayey mud, which may have been taken in on account of nutritive matter contained in it, or which may be the remnants of worms which had fed on mud.

7. Supplementary Notice on the Genus *Idiops*.

By the Rev. O. P. CAMBRIDGE.

(Plate VIII.)

Since writing the communication upon the genus *Idiops* read at the Society's Meeting on the 10th ult.*, I have discovered, in the collection of Arachnida at the British Museum, three additional undescribed species—one from the same locality as that from which *Idiops sigillatus* was received (Swan River, Australia), the two others from Africa (one from its eastern the other from its southern portion). The distribution of this genus thus appears to be exceedingly wide, comprising Syria, different parts of South America, Africa, and Australia.

The following are the descriptions that I have been enabled to make of these additional species:—

IDIOPS MEADII, n sp. (Plate VIII. fig. 4.)

Male adult; length 10 lines; length of cephalothorax 6 lines, breadth of ditto $4\frac{3}{4}$ lines.

The whole of this Spider, except the abdomen, is of a deep and somewhat bistre-brown colour. The *cephalothorax* is of a broad

* See *antè*, p. 101.

oval form, truncate before, and depressed above; the hinder portion of the caput is very slightly raised, and the normal furrows and indentations are strongly marked; the furrow denoting the junction of the caput and thoracic segment is very deeply indented, and of a curved form, the curve directed backwards: the surface of the cephalothorax is finely, profusely, and almost wholly covered with minute tubercular granulations; it is otherwise destitute of clothing or armature.

The *eyes* are normal in number and position: they are placed on two slightly raised or tubercular elevations; one, immediately above the falces, is occupied by the two foremost eyes, the other (and larger one), at some distance behind the former, is occupied by the remaining six eyes: the two foremost eyes are about an eye's diameter above the lower margin of the clypeus; they are the largest of the eight, and are very near together (less than half an eye's diameter), but considerably removed from the two behind them, which form the second row; these are further apart than those of the foremost (or first) row, the four forming a narrow oblong figure, rather wider behind than before: the hindermost (or third) row is composed of four eyes, in a strongly curved transverse line, the curve directed backwards; the two central eyes of this row are the smallest of the eight, and are further apart from each other than each is from the lateral eye on its side.

Falces moderate in length and strength, prominent, and curved in profile; they are furnished towards their extremities, on the upperside, with bristly hairs, and a group of short, strong, black spines.

Legs strong, moderate in length, which is relatively 4, 1, 2, 3, 1 and 4 not differing much; they are sparingly furnished with hairs and bristles; and a few small black spines occupy the undersides of tibiæ, tarsi, and metatarsi; the tibiæ of the first pair are inordinately strong, enlarging gradually to their fore extremity, near which, on the inner side, is a strongish corneous enlargement; close in front of and beyond this is another of a similar but stronger and more marked character, and of an abruptly bent form: each tarsus ends with three curved claws; the two superior ones much the strongest, and pectinated at their base, the inferior one small and apparently destitute of pectinations.

Palpi strong, rather long, and furnished with bristly hairs; the *radial* is much longer than the cubital joint, and very tumid in its form, its hinder portion being almost globular. This joint has a prominence near the middle of its outer side armed with a row of short, strong, tooth-like black spines; the *digital* joint is short, and has a blunt-pointed prominence at its outer extremity, and some strong spines at its extremity on the upperside; the *palpal organs* are strong and prominent, consisting of a corneous lobe, elongated into a strong, *bent* (but not *twisted*) corneous apophysis, which diminishes in size to its extremity, where it is bifid, the lower limb of the bifid portion being much the longest, and curved, the upper one very slight, but both sharp-pointed.

Maxillæ strong, divergent, with a rudimentary point or prominence at their extremities on the inner side. The *labium* and *sternum* present no deviation from the normal structure.

The *abdomen* is small, very convex above, and projects a little over the base of the cephalothorax; it is of a deep but dull brown colour, and very sparingly furnished with hairs; the spiracular plates (four in number) are large, and similar to the legs in colour: the abdomen was a good deal shrunken in behind, so that it was not easy to get a full view of the spinners; but their number was four, and those of the superior pair appeared to be much longer and stronger than those of the inferior.

The example (an adult female) from which the above description was made is in the British-Museum collection; it was captured by the late Captain Speke (in East Africa) during his expedition to the sources of the Nile, and presented to the British Museum by Earl Russell. It is nearly allied to *Idiops sigillatus*, which it resembles in the general form of the palpi; but it may at once be distinguished from that genus by the entire absence of a spiny armature on the cephalothorax and abdomen, as well as by the want of the four peculiar seal-like markings so characteristic of the abdomen of *I. sigillatus*. It is with a strong and grateful remembrance of past assistance in the study of Spiders, that I give to this species the name of Mr. Meade, of Bradford, Yorkshire.

IDIOPS BLACKWALLII, n. sp. (Plate VIII. fig. 5.)

Male adult: length 11 lines; length of cephalothorax $5\frac{3}{4}$ lines, breadth of cephalothorax $5\frac{1}{2}$ lines.

This conspicuous Spider is of a deep black-brown colour, the cephalothorax and upperside of the abdomen being densely clothed with a silky adpressed pubescence of a silvery-white colour, offering a striking contrast to the dark (nearly black) colour of the legs and palpi; mingled with this pubescence, on the upperside of the abdomen, are hairs of a yellowish hue towards its fore part, and others of a brownish mouse-colour towards its hinder part: near the middle of the upperside there appeared to be a largish pale-yellow spot or patch; but this was not traceable with accuracy, owing to the shrunken state of the abdomen: the sides and under part melt gradually from the hue of the upperside into a deep mouse-brown: the spiracular plates (four in number, and glabrous) differ from each other in colour, those of the anterior pair being dark yellow-brown, while those of the posterior pair are of an orange-yellow colour.

The *cephalothorax* is depressed above (without any elevation of the occipital portion of the caput), and of a broad-oval form, narrowest in front, where it is less distinctly truncate, and proportionately rather narrower than in some other species; the hinder part is very broad, and indented on its posterior margin; the form of the cephalothorax is thus heart-shaped, blunt at its narrower end, and nearly resembles that of *Idiops kochii*.

The *eyes* are situated upon a single oval tubercular elevation, immediately above the fore margin of the caput. This elevation is furnished with some strong, curved, spine-like bristles before and behind. The grouping of the eyes is normal, though more compact than in *Idiops meadii* and *I. sigillatus*: the two forming the foremost row are close above the fore margin of the caput: those of the second row (also two in number) are the largest of the eight, and seated on the summit of the elevation; they are nearer together, though forming a rather longer row than the two foremost eyes: those of the third (or hinder) row are four in number, and small; they form two pairs, a pair occupying each extremity of the row; the eyes of each of these pairs are contiguous to each other, thus leaving a wide interval between the two pairs: those of the first and second rows form nearly a square, whose transverse diameter is rather shorter than its longitudinal, and its fore side the shortest.

The *legs* are very strong, and moderately long, their relative length being 4, 1, 2, 3; the difference between 1, 2, and 3 is slight; the actual lengths of 4 and 1 are 20 and 15 lines respectively: they are thickly clothed with brown-black hairs and inconspicuous spines: the metatarsi and tarsi are furnished beneath with pads of close-set hairs; those on the tarsi are peculiarly arranged, leaving a longish narrow oval hollow along the centre of the pad: the tibiae of the first pair are armed at their extremity, rather underneath on the inner side, with a strong, curved, corneous projection, terminating with spiny bristles and sharp tooth-like spines; just above this projection is a short, strongish, tooth-like spine, which in this species occupies a position similar to that occupied in *Idiops meadii* by a second corneous process.

The *palpi* are moderately long, strong, and furnished, like the legs, with hairs and spines: the *radial* joint is longer, but not stronger than the *cubital*; it is furnished thickly, and very conspicuously beneath, with long hairs and spines: the *digital* joint has a pad or tuft of close-set hairs at its extremity; and the *palpal organs* consist of a nearly circular corneous bulb, prolonged in a slightly tortuous form, and terminating with two points, of which one is longer than the other and curved. These organs bear considerable resemblance to those of *Dysdera erythrina* (Walck.).

The *falces* have their profile abruptly curved; they are prominent, but moderate in length and strength, of a dark colour, and thickly furnished with mouse-grey hairs, among which are a few of a blackish hue; the extremities have no spines on their uppersides; and the hairs are so arranged as to form, with the dark ground, longitudinal bands or stripes.

The *maxillæ* are long and cylindrical, but have a protuberant point at their inner extremities; they are furnished on the inner sides with a fringe of strong bright-reddish hairs.

Labium small, oblong, rounded at its apex.

Sternum small, narrow-oval, very little wider behind than before.

The spinners were hidden beneath the dense hairy covering of that portion of the abdomen.

This fine and distinct species is described from a specimen in the British-Museum collection, received from the Swan River, Australia. In its general form and character it mostly resembles *Idiops kochii* (a native of South America); but it may readily be distinguished from all yet known species of the genus by the striking contrast of its colours. The specific name conferred upon it needs no explanation to those who are aware of Mr. John Blackwall's long and unwearied labours in the field of araneological science.

IDIOPS THORELLII, n. sp. (Plate VIII. fig. 6.)

Male adult: length $4\frac{1}{2}$ lines; length of cephalothorax $2\frac{1}{2}$ lines, breadth of cephalothorax 2 lines.

The fore part (including the legs and palpi) of this Spider is of an orange-yellow-brown colour; it is very sparingly furnished with hairs, and the legs have a few fine spines. The abdomen is dark yellow-brown; the form of the cephalothorax is a broad but regular oval, depressed above; the normal furrows and indentations are fairly marked. The *eyes* are seated in the normal position upon two tubercular elevations, as in *Idiops meadii*; the two which form the first row are the largest of the eight, and very near together; they are situated close above the frontal margin, and form, with those of the second row, a narrow oblong figure, whose hinder width is the greatest; the two intermediate eyes of the hinder row are the smallest of the eight, and much further from each other than each is from the end one on its side. The *falces* are moderate in length and strength, and are armed with a group of strongish spines near their extremities on the upperside. The *palpi* are long and strong: the *radial joint* is very strong, longer than the cubital, and tumid behind; it has a prominence on the middle of the outer side, armed with small tooth-like spines; near the outer extremity of this joint is another prominence, smaller, but similarly armed: the palpal organs consist of a large, globular, corneous lobe, prolonged into a not very large, nor very long-pointed, curved, beak-like projection: the form of the maxillæ and labium is normal; but the sternum is of a somewhat pentagonal form, moderate in size, and broader behind than before. The *legs* are moderate in length and strength; their relative length is 4, 1, 2, 3; the tibiæ of the first pair have two corneous projections near their extremities on the inner side; and each tarsus terminates with three claws, of which the two superior ones are pectinated, and the inferior one much the smallest.

A single example of this species is in the British-Museum collection.

Hab. South Africa. Its small size, as well as its colours and structure, will readily distinguish it from others of the genus. The specific name given to it is that of Dr. T. Thorell, Adj. Prof. Zool. Univ. Upsalæ, and a distinguished araneologist.

DESCRIPTION OF PLATE VIII.

- Fig. 1. *Idiops kochii*, ♂, p. 103.
a. Fore-right view of cephalothorax and falces.
b, c. Palpus in two positions.
d. Profile, without legs or palpi.
e. Natural length of Spider.
2. *Idiops sigillatus*, ♂, p. 105.
a. Fore-right view of cephalothorax and falces.
b. Underside of cephalothorax, showing maxillæ, labium, and sternum.
c, e. Palpus in two positions.
d. Leg of first pair.
f. Hinder portion of abdomen.
g. Profile, without legs or palpi.
h. Natural length of Spider.
3. *Idiops syriacus*, ♀, p. 107.
a. Fore-right view of cephalothorax and falces.
b. Profile, without legs or palpi.
c. Natural length of Spider.
4. *Idiops meadii*, ♂, p. 152.
a. Fore-right view of cephalothorax and falces.
b, c. Palpus in two positions.
d. Leg of first pair.
e. Profile, without legs or palpi.
5. *Idiops blackwallii*, ♂, p. 154.
a. Fore-right view of cephalothorax and falces.
b, c. Palpus in two positions.
d. Leg of first pair.
e. Profile, without legs or palpi.
f. Underside of tarsus and metatarsus.
6. *Idiops thorellii*, ♂, p. 156.
a. Leg of first pair.
b. Fore-right view of cephalothorax and falces.
c, e. Palpus in two positions.
d. Tarsal claws.
f. Natural length of Spider.
g. Profile, without legs or palpi.

March 24, 1870.

Dr. E. Hamilton, V.P., in the Chair.

Mr. P. L. Sclater exhibited a coloured drawing, forwarded to him by Dr. S. Salvadori of Turin, C.M.Z.S., representing a bird which that naturalist had proposed to describe as a new genus and species of Megapodes, but which was evidently the remarkable Pigeon recently named by Mr. Gould *Otidiphaps nobilis* (Ann. N. H. 4th series, vol. v. p. 62, 1870; cf. P. Z. S. *antèd*, p. 4). Dr. Salvadori had received the specimen in a box of skins bought at Singapore, but stated to have been brought from Macassar. All the other birds in this box (fifty-eight in number, belonging to forty different